

WHAT IS CLAIMED IS:

1. A tool for extruding a pipe-shaped melt strand of thermoplastic material, the tool comprising: a ring-shaped outlet nozzle (5) and at least one melt conduit leading (6.1, 6.2, 6.3) from an inlet opening (7.1, 7.2, 7.3) of the tool to the outlet nozzle (5) which extends concentrically with respect to a center axis (A) of the tool and are cut into a peripheral wall as spirally turning helices and form a helical manifold (8) extending in an outlet direction (E) of the melt strand, and the helices are cut into the inner peripheral wall (60) and into an outer peripheral wall (61) of the at least one melt conduit.
2. The tool in accordance with claim 1, wherein the helices are formed in a semi-circular shape when viewed in cross section.
3. The tool in accordance with claim 2, wherein the helices cut into the inner peripheral wall (60) and into the outer peripheral wall (61) of the melt conduit (6.1, 6.2, 6.3) are positioned congruently opposite each other.
4. The tool in accordance with claim 2, wherein the helices cut into the inner peripheral wall (60) and into the outer peripheral wall (61) of a melt conduit (6.1, 6.2, 6.3) are arranged offset with respect to each other in the outlet direction (E).
5. The tool in accordance with claim 4, wherein a depth (T) of the helices decreases, starting from the inlet opening and in a direction toward the outlet nozzle (5).

6. The tool in accordance with claim 5, wherein the tool is a multi-layer tool with a plurality of melt conduits (6.1, 6.2, 6.3) leading to the outlet nozzle (5) and arranged concentrically with respect to each other and with respectively associated helical manifolds (8), wherein the melt conduits (6.1, 6.2, 6.3) are brought together in one location (S) in the tool and communicate with the outlet nozzle (5).

7. The tool in accordance with claim 1, wherein the helices cut into the inner peripheral wall (60) and into the outer peripheral wall (61) of a melt conduit (6.1, 6.2, 6.3) are positioned congruently opposite each other.

8. The tool in accordance with claim 1, wherein the helices cut into the inner peripheral wall (60) and into the outer peripheral wall (61) of the melt conduit (6.1, 6.2, 6.3) are arranged offset with respect to each other in the outlet direction (E).

9. The tool in accordance with claim 1, wherein a depth (T) of the helices decreases, starting from the inlet opening and in a direction toward the outlet nozzle (5).

10. The tool in accordance with claim 1, wherein the tool is a multi-layer tool with a plurality of melt conduits (6.1, 6.2, 6.3) leading to the outlet nozzle (5) and arranged concentrically with respect to each other and with respectively associated helical manifolds (8), wherein the melt conduits (6.1, 6.2, 6.3) are brought together in one location (S) in the tool and communicate with the outlet nozzle (5).